

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018389**Date Inspected:** 22-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr. Chen xi**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder(OBG)**Summary of Items Observed:**

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

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The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 07451.

Ultrasonic Testing (UT)

This QA performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated UT report for this date. The members are identified as OBG Floor beam weld Components. Total number of welds UT Tested: 6 No's. The weld designations are review as follows:

1. FB3286-001-257,179,389,344,339,200.

This QA Inspector Randomly observed the following work in progress:

ZPMC personnel heat straightening OBG member is identified as LD3041B-001. Distortion appeared to be caused

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by welding of the material. ZPMC Quality Control (QC) inspector identified as Mr. Zhang yaxu was present to monitor the heat straightening process. The heat straightening appeared to comply with Caltrans Engineer approved Heat Straightening Report (HSR) HSR (B) 435.

ZPMC personnel heat straightening OBG member is identified as LD3041A-001. Distortion appeared to be caused by welding of the material. ZPMC Quality Control (QC) inspector identified as Mr. Zhang yaxu was present to monitor the heat straightening process. The heat straightening appeared to comply with Caltrans Engineer approved Heat Straightening Report (HSR) HSR (B) 436.

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Shielded Metal Arc Welding (SMAW) Repair welding of weld joint SEG3020K-163. Welder is identified as 045268. ZPMC Quality Control (QC) is identified as Mr. Xu jie. The welding variables appeared to comply with the Applicable WPS: WPS-345-SMAW-3G (3F)-Repair. The repair welding was being performed as per the Welding Repair Report (WRR) No: B-WR17514. This weld was rejected by ZPMC UT Technicians and recorded on UT report No: B787-UT-17597. Refer the attached photos for reference.

Flux Cored Arc Welding (FCAW) Repair welding of weld joint SEG3020K-180. Welder is identified as 045276. ZPMC Quality Control (QC) is identified as Mr. Xu jie. The welding variables appeared to comply with the Applicable WPS: WPS-345-FCAW-2G (2F)-Repair. The repair welding was being performed as per the Welding Repair Report (WRR) No: B-WR17515. This weld was rejected by ZPMC UT Technicians and recorded on UT report No: B787-UT-17597. Refer the attached photos for reference.

FCAW of weld joint LD3048-001-019. Welder is identified as 045203. ZPMC Quality Control (QC) is identified as Mr. Zhu jun. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2132-3.

FCAW of weld joint SA3414-003-003. Welder is identified as 020009. ZPMC Quality Control (QC) is identified as Mr. Zhu jun. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2232-TC-U4b-F.

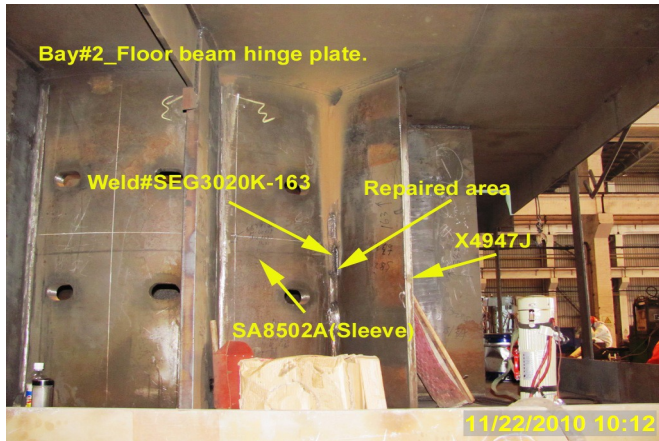
FCAW of weld joint SA3414-005-003. Welder is identified as 067184. ZPMC Quality Control (QC) is identified as Mr. Zhu jun. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2232-TC-U4b-F.

This QA Inspector performed photo documentation on Lift 14 Hinge plates are identified as FB3286A, FB3273A, FB3272A, FB3328B, FB3327A, FB3343A, SA3325A, SA3324A, SA3409A and SA3410A located in sub assembly bay 2 and 3. These photos have been sent to QA lead Inspector and Structural Material Representative (SMR) by mail.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

Only general conversation was held between QA and Quality Control (QC) concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By: Prabhu,Surendra

Quality Assurance Inspector

Reviewed By: Hall,Steven

QA Reviewer